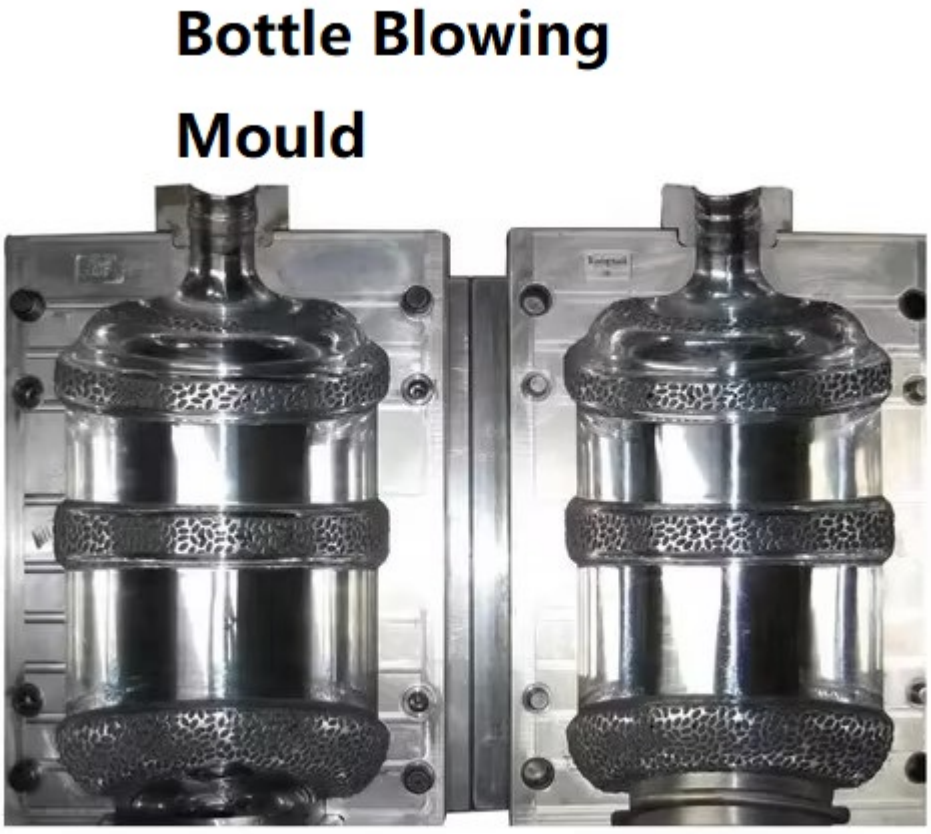
Taizhou Qihong Mold Co., Ltd. – Precision Engineering Solutions for Global Preform and Handle Mould Manufacturing

Taizhou Qihong Mold Co., Ltd. is a professional manufacturer specializing in high-precision plastic mould design and production, with a strong focus on PET preform mould systems and industrial mould engineering solutions. Located in Taizhou, Zhejiang Province, China—an important hub for mould manufacturing and industrial innovation—the company has built a solid reputation for delivering durable, precise, and high-efficiency mould products to customers around the world.

With years of technical experience, advanced production equipment, and a strong engineering team, Qihong Mold continues to serve industries including beverage packaging, daily chemical products, food containers, pharmaceutical packaging, and industrial plastic components. The company integrates design innovation, CNC machining precision, and strict quality control to ensure that every mould meets international performance standards.

Company Overview



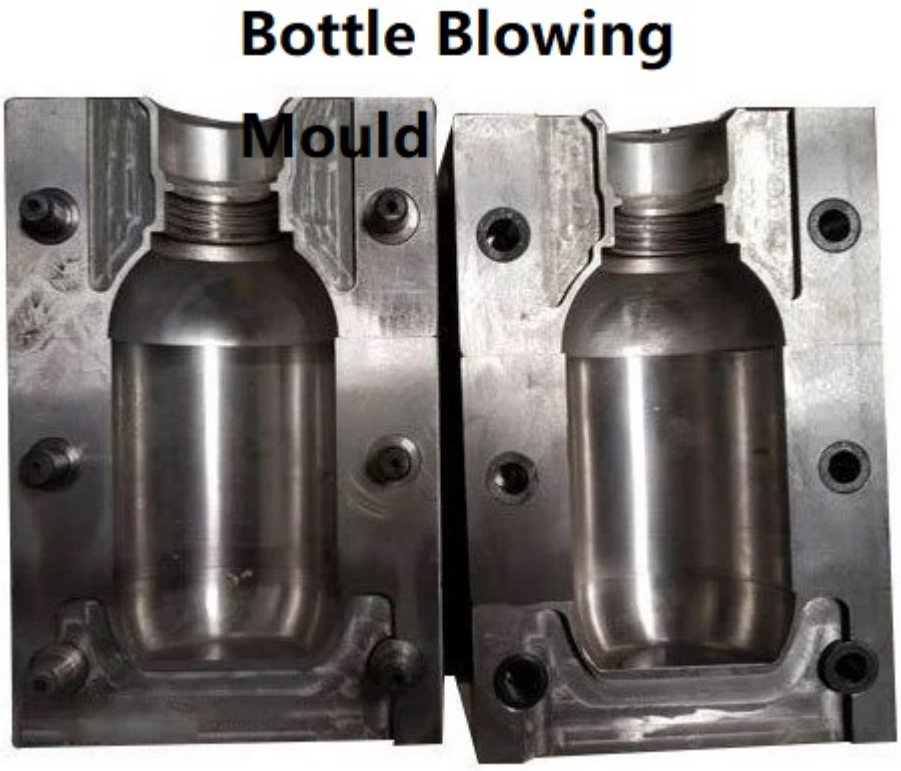
Founded with a vision to provide high-quality and cost-efficient mould solutions, Taizhou Qihong Mold Co., Ltd. has developed into a trusted name in the plastic mould manufacturing sector. The company focuses on PET preform moulds, blow mould systems, cap moulds, and customized industrial mould structures designed for high-volume production environments.

From the beginning, Qihong Mold has emphasized technological development and engineering accuracy. Through continuous investment in research, digital design systems, and modern machining centers, the company has strengthened its capability to produce complex mould

structures with tight tolerances and long service life.

One of the core strengths of the company is its ability to customize solutions according to customer requirements. Whether the need is for high-cavity preform systems or specialized industrial mould structures such as Handle Mould, Qihong Mold provides tailored engineering support to meet different production demands.

The company's products are widely used in bottled water production lines, beverage filling systems, cosmetic packaging, edible oil containers, and industrial plastic forming applications. With stable performance and long mould life cycles, Qihong Mold has established partnerships with clients across Asia, Europe, the Middle East, Africa, and South America.



Product Range

Taizhou Qihong Mold Co., Ltd. offers a wide range of mould products designed for precision plastic forming and large-scale industrial production.

1. PET Preform Mould Systems

PET preform moulds are one of the company's core product categories. These moulds are designed for high-speed injection moulding machines and are suitable for producing preforms of various neck sizes, weights, and designs.

Key features include:

High cavity efficiency for mass production
Excellent cooling system design for reduced cycle time

Precision machining for consistent product weight
Long mould lifespan with wear-resistant steel
Compatibility with major injection machine brands

These systems are widely used in bottled water, carbonated drinks, edible oils, and pharmaceutical packaging industries.

2. Cap Mould Systems

Cap moulds are another important product line, designed for producing plastic caps for beverage bottles, cosmetic containers, and industrial packaging.

Features include:

High-speed production capability
Precise thread forming system
Multi-cavity design options
Stable and durable performance under high pressure
3. Blow Mould Systems

Blow mould systems are used for producing hollow plastic containers such as bottles and jars. Qihong Mold designs blow moulds with optimized airflow and material distribution to ensure uniform wall thickness.

Advantages include:

Smooth surface finishing
Lightweight structure design
High thermal resistance
Custom bottle shape support
4. Customized Industrial Mould Solutions

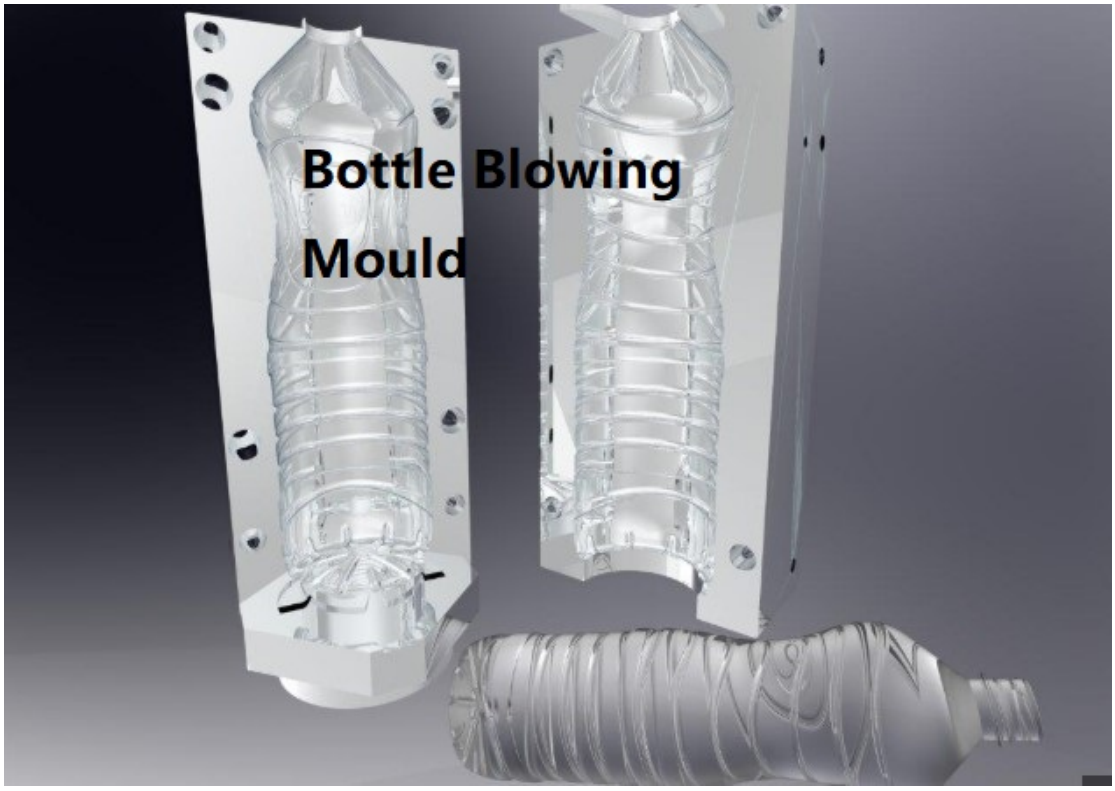
In addition to standard product lines, Qihong Mold also provides customized mould development services. These solutions are designed based on client drawings, product requirements, and production environment needs.

This category includes specialized engineering moulds, such as structural plastic parts, industrial components, and custom mechanical forming systems including Handle Mould solutions for packaging and container industries.

Advanced Manufacturing Technology

Taizhou Qihong Mold Co., Ltd. utilizes advanced manufacturing systems to ensure precision and stability in every mould produced. The company operates modern CNC machining centers, EDM spark machines, wire cutting systems, and high-speed milling equipment.

The production process is carefully controlled through digital design and simulation software. Engineers use 3D modeling systems to optimize mould flow channels, cooling systems, and structural strength before actual production begins.



Each mould undergoes strict dimensional inspection and functional testing to ensure consistency and performance. High-grade steel materials are selected from trusted suppliers, ensuring durability and resistance to wear under high-pressure production conditions.

Quality Control and Certification

Quality assurance is a fundamental principle of Taizhou Qihong Mold Co., Ltd. The company implements strict quality control procedures at every stage of production, from raw material inspection to final assembly testing.

Quality control processes include:

Material hardness testing
Dimensional accuracy inspection
Trial mould testing
Injection performance validation
Surface finish evaluation

The company follows international manufacturing standards and continuously improves its production systems to meet global quality expectations. Each mould is designed to provide stable performance, reduced maintenance requirements, and long operational life.

Research and Development

Innovation is a key driving force behind Qihong Mold's success. The company maintains a dedicated R&D team that focuses on improving mould design efficiency, production speed, and structural reliability.

Research efforts include:

Development of high-cavity mould systems

Optimization of cooling channel design
Improvement of material wear resistance
Enhancement of product demoulding efficiency

In the development of specialized components such as Handle Mould, the R&D team focuses on improving ergonomic design, structural stability, and mass production efficiency. These improvements help clients achieve higher productivity and lower production costs.

Through continuous innovation, Qihong Mold aims to remain competitive in the global mould manufacturing industry.

Sustainable Manufacturing Practices

Taizhou Qihong Mold Co., Ltd. is committed to environmentally responsible manufacturing. The company implements energy-efficient machining systems and reduces waste through optimized production planning.

Sustainability initiatives include:

Recycling of metal scrap materials
Reduction of energy consumption in machining processes
Use of environmentally friendly lubricants and cooling fluids
Optimization of production layouts to reduce material waste

By integrating sustainable practices into manufacturing, the company contributes to a greener industrial ecosystem while maintaining high production efficiency.

Customer Support and After-Sales Service

Customer satisfaction is a key priority for Qihong Mold. The company provides comprehensive technical support throughout the entire project lifecycle, from design consultation to post-delivery assistance.

Services include:

Technical design consultation
Installation guidance
Mould maintenance support
Spare parts supply
Production optimization advice

The after-sales team ensures that customers can operate their mould systems efficiently and minimize downtime. Long-term cooperation and trust-building are core values of the company's customer service philosophy.

Global Market Reach

With strong manufacturing capabilities and reliable product performance, Taizhou Qihong Mold Co., Ltd. has expanded its business to international markets. The company exports mould products to clients in Europe, North America, South America, Southeast Asia, the Middle East, and Africa.

Its global success is supported by:

Stable product quality
Competitive pricing
Flexible customization options
Fast delivery capabilities

Qihong Mold continues to strengthen its global partnerships with beverage manufacturers, packaging companies, and industrial producers, supporting their production needs with high-performance mould solutions.

Industry Applications

Qihong Mold products are widely used across multiple industries, including:

Bottled water production
Carbonated beverage manufacturing
Cosmetic packaging
Pharmaceutical containers
Food packaging industry
Industrial plastic components

The versatility of the company's mould solutions allows customers to achieve efficient and stable production in different application environments.

Advanced Engineering Design System

Modern mould manufacturing requires far more than machining capability; it demands accurate digital engineering and predictive design analysis. Qihong Mold has built a structured engineering system that integrates CAD, CAE, and CAM technologies into a unified workflow.

1. 3D Digital Modelling and Simulation

Every mould begins with a fully digital design. Engineers use advanced 3D modeling software to construct precise geometries of preform systems, cap structures, and blow mould assemblies.

Before production begins, simulation tools are applied to analyze:

Material flow behavior inside cavities
Cooling efficiency and temperature distribution
Structural stress points under high pressure
Ejection system movement and timing

This digital simulation stage significantly reduces trial-and-error costs and improves first-run success rates.

2. Flow Channel Optimization

One of the most critical aspects of mould design is the flow channel system. Qihong Mold engineers carefully optimize runner layouts to ensure uniform filling across all cavities.

Key objectives include:

Minimizing pressure loss during injection
Reducing cycle time for high-speed production

Preventing material degradation due to heat retention
Ensuring consistent product weight across cavities

Through continuous refinement, the company achieves stable output even in high-cavity mould systems.

3. Cooling System Engineering

Cooling efficiency directly affects production speed and product quality. Qihong Mold applies deep-drilling technology and conformal cooling design concepts to enhance heat dissipation.

Benefits of optimized cooling systems:

Shorter cycle times
Improved dimensional stability
Reduced warping and shrinkage
Higher production efficiency

By balancing cooling uniformity and structural strength, the company ensures long-term operational reliability.

Precision Manufacturing Infrastructure

The manufacturing base of Qihong Mold is equipped with a full range of modern machining technologies designed for high-precision output.

1. CNC High-Speed Machining Centers

CNC systems form the backbone of production. These machines are capable of processing complex geometries with micron-level accuracy.

Applications include:

Core and cavity machining
Surface contour finishing
Precision alignment components

High-speed spindles and automated tool changers improve production efficiency while maintaining consistent quality.

2. EDM and Wire Cutting Technology

Electrical Discharge Machining (EDM) is used for producing intricate and hard-to-machine features.

This includes:

Deep cavity shaping
Sharp corner detailing
Complex structural inserts

Wire cutting technology further ensures accuracy in precision components that require tight tolerance control.

3. Surface Treatment and Polishing Systems

Surface quality is essential in mould production, especially for packaging industries where clarity and finish are critical.

Qihong Mold applies:

Mirror polishing techniques
Texture engraving systems
Anti-corrosion surface treatments

These processes ensure smooth product release and enhance final product appearance.

Production Management and Workflow Optimization

Beyond machinery, production efficiency depends heavily on workflow design. Qihong Mold has implemented structured production management systems that integrate planning, execution, and quality monitoring.

1. Digital Production Scheduling

Each project is assigned a digital production timeline. This system tracks:

Material preparation
Machining stages
Assembly progress
Testing and validation

This ensures that deadlines are met without compromising quality standards.

2. Modular Assembly Process

Moulds are assembled using a modular approach, allowing engineers to work on multiple sections simultaneously. This improves efficiency and reduces overall production time.

Modules typically include:

Core assembly units
Cavity blocks
Ejection systems
Cooling channels
Frame structures
3. Internal Quality Gate System

Instead of final-stage inspection only, Qihong Mold applies multi-stage quality checkpoints throughout production.

These include:

Incoming material inspection
Mid-process dimensional checks
Pre-assembly verification
Final performance testing

This layered system reduces defect risks and improves consistency.

Material Engineering and Steel Selection Strategy

Material selection plays a vital role in mould durability and performance. Qihong Mold uses high-grade steel materials sourced from certified suppliers in Europe and Asia.

Common material types include:
Pre-hardened tool steel
Corrosion-resistant stainless steel
High-strength alloy steel
Heat-treated hardened steel
Material selection criteria:
Wear resistance under high-cycle production
Thermal stability during injection processes
Machinability for complex design features
Long-term structural integrity

Each mould component is matched with the most suitable material depending on its function and stress load.

Industrial Application Expansion

Qihong Mold continues to expand its application scope across multiple industries beyond traditional beverage packaging.

1. Food and Beverage Industry

This remains the core application area. Mould systems are used in:

Bottled water production
Juice and carbonated drinks
Edible oil containers

High-speed production requirements make precision mould performance essential.

2. Pharmaceutical Packaging

Pharmaceutical containers require strict hygiene and dimensional accuracy. Qihong Mold develops moulds that ensure:

Clean surface finishes
Stable volume consistency
High sealing compatibility
3. Personal Care and Cosmetics

Packaging for cosmetics demands both functionality and aesthetic appeal. The company produces moulds for:

Shampoo bottles
Cream jars
Spray containers

Surface texture and clarity are key engineering focuses in this segment.

4. Industrial Chemical Containers

For industrial applications, durability and chemical resistance are essential. Mould systems are designed for:

Lubricant containers
Cleaning chemical bottles
Agricultural chemical packaging
Equipment Maintenance and Lifecycle Support

A key strength of Qihong Mold lies in its after-delivery technical support system. The company recognizes that mould performance depends not only on manufacturing quality but also on proper maintenance.

1. Preventive Maintenance Programs

Customers are provided with structured maintenance guidelines, including:

Regular cleaning procedures
Lubrication schedules
Wear inspection intervals
2. Spare Parts Supply System

To reduce downtime, Qihong Mold maintains a supply system for:

Ejector pins
Sealing components
Cavity inserts
Guide systems
3. Technical Repair Support

In case of operational issues, engineers provide:

Remote troubleshooting guidance
On-site repair support when required
Performance optimization suggestions

This ensures long-term stability and extended mould life cycles.

Global Logistics and Export System

As an international supplier, Qihong Mold has developed a structured logistics system that supports efficient global delivery.

1. Packaging Engineering

Moulds are packaged using reinforced export-standard materials:

Anti-rust coatings
Shock-resistant wooden crates
Internal structural fixation systems
2. International Shipping Coordination

The company works with global freight partners to manage:

Sea freight
Air freight
Multi-destination distribution
3. Customs Documentation Support

Export documentation services include:

Commercial invoices
Packing lists
Certificate of origin preparation

This ensures smooth customs clearance across different countries.

Industry Collaboration and Technical Partnerships

Qihong Mold actively collaborates with:

Injection molding machine manufacturers
Packaging production line integrators
Material science research institutions

These partnerships help the company stay aligned with evolving industry technologies and global manufacturing trends.

Joint development projects often focus on:

High-speed production systems
Lightweight packaging innovation
Energy-efficient mould design
Digital Transformation and Smart Manufacturing Direction

The company is gradually integrating digital manufacturing technologies into its operations.

Key developments include:
Digital twin simulation of mould systems
Data tracking for production efficiency
Smart monitoring of machining processes
Predictive maintenance planning systems

These advancements contribute to higher precision, lower production waste, and improved operational transparency.

Training and Technical Knowledge Transfer

Qihong Mold also invests in customer education and technical training.

Training programs include:

Mould installation guidance
Injection parameter optimization
Maintenance skill development
Production troubleshooting techniques

This knowledge transfer helps clients maximize production efficiency and reduce operational risks.

Long-Term Development Strategy

The long-term strategy of Taizhou Qihong Mold Co., Ltd. focuses on three major pillars:

1. Technological Advancement

Continuous upgrading of engineering design systems and machining capabilities.

2. Global Market Expansion

Strengthening presence in emerging markets while maintaining strong partnerships in established regions.

3. Sustainable Manufacturing Growth

Balancing industrial expansion with environmentally responsible production practices.

Extended Conclusion

Through continuous innovation in engineering design, precision manufacturing, and global service systems, Taizhou Qihong Mold Co., Ltd. has established itself as a comprehensive solution provider in the mould industry. Its capabilities extend far beyond standard mould production, integrating digital design, advanced machining, lifecycle support, and international logistics into a unified operational framework.

With strong technical expertise and a commitment to quality-driven manufacturing, the company continues to support global industries in achieving efficient, stable, and scalable plastic production systems.
For more information or business cooperation, please visit https://www.qhpreformmould.com/